

USOL'TSEVA, A.S., uchitel'nitsa (Moskva)

"Forest treasures" by B.V.Grozdov. Reviewed by A.S.Usol'tseva.  
Biol.v shkole no.4:91 J1-Ag '60. (MIRA 13:7)  
(Forests and forestry)  
(Grozdov, B.V.)

SOKOLOVA, A.V., zasluzhennaya uchitel'nitsa shkoly RSFSR; USOL'TSEVA, A.S.,  
uchitel'nitsa (Moskva)

Organizing evening meetings and exhibitions on scientific and  
atheistic tops. Biol. v shkole no.2:35-38 Mr-Ap '61. (MIRA 14:3)  
(Atheism—Study and teaching)  
(Science—Study and teaching)

USOL'TSEVA, A.S., uchitel'nitsa (Moskva)

Use of popular scientific literature in botany classes. Biol. v  
shkole no.3:28-31 My-Je '61. (MIRA 14:7)  
(Botany--Juvenile literature)

VINOGRADOVA, N.V., uchitel'nitsa; USOL'TSEVA, A.S., uchitel'nitsa

"War with an invisible enemy" by A.G. Lebedenko. Reviewed by  
N.V. Vinogradova, A.S. Usol'tseva. Biol. v shkole no.5:90-91  
(MIRA 16:2)  
S-0 '62.

1. Shkola No.46 Moskvy (for Vinogradova).  
(Pavlovskii, Evgenii Nikanorovich, 1884-)  
(Lebedenko, A.G.)

USOL'TSEVA, A.S. (Moskva)

Evening devoted to scientifically based atheistic studies  
in connection with the course in human anatomy, physiology,  
and hygiene. Biol. v shkole no.1:31-35 Ja-F '63.  
(MIRA 16:6)

(Atheism—Study and teaching)

USOL'TSEVA, A.S. (Moskva)

"Chrestomathy of botany." Reviewed by A.S.Usol'tseva. Biol. v shkole  
no.2:87 Mr-Ap '63. (MIFI 1e:4)  
(Readers and speakers—Botany)

Anna sergeevna usol'tseva, abit. 1963

Biol. v shkole no 3: 96

USOL'TSIEVA, K.I.

Principal stages in the formation of the relief and the mantle of friable deposits of the Kola Peninsula. Uch.zap. Kursk.gos.ped.inst. (MIRA 12:4) no.4:174-200 '57.

1. Iz kafedry geografii Kurskogo gosudarstvennogo pedagogicheskogo instituta. (Kola Peninsula--Physical geography)

USOL'TSEVA, K.I.

Soil cover in the northeastern part of the "40 Let Oktiabria"  
Collective Farm. Uch. zap. VGPI 27:79-89 '62. (MIRA 16:8)

(Vologda District—Soils)

USOL'TSEVA, K.I. (Vologda)

Snow surveys with seventh grade students. Geog. v shkole  
25 no.6:32-35 N-D '62. (MIRA 15:12)  
(Snow surveys)  
(Climatology--Study and teaching)

USOL'TSEVA, K. I.

"Northern Yakutia; physicogeographical characteristics."  
Izv. Vses. geog. ob-va 94 no.6:533-534 N-D '62.  
(MIRA 16:1)

(Yakutia--Physical geography)

S/180/62/000/006/002/022  
E111/E451

AUTHORS: Tumanov, V.I., Funke, V.F., Belen'kaya, L.I.,  
Usol'tseva, L.P. (Moscow)

TITLE: Influence of alloy additions on the surface tension of  
metals of the iron group

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye tekhnicheskikh  
nauk. Metallurgiya i toplivo, no.6, 1962, 43-48

TEXT: The effect was investigated of alloy additions to nickel  
and cobalt on surface tension and weldability of alumina by them;  
the alloy additions studied were molybdenum, tungsten, titanium,  
copper, tungsten carbide and titanium carbide. The sessile drop  
method was used at a vacuum of  $10^{-5}$  mm Hg and temperatures of about  
1500°C (1400°C copper). Over the alloying range studied (0.5 to  
20 at.%), a relationship was found between, on the one hand, the  
contact angle, surface tension, interfacial tension and work of  
adhesion and, on the other, the atomic diameter and thermal  
stability of the oxides of the alloy additions. With the carbides  
the greatest reduction in the contact angle and increase in the work  
of adhesion was obtained when 5% TiC was introduced into cobalt

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Influence of alloy ...

S/180/62/000/006/002/022  
E111/E451

(the values then being 62°C and 3600 erg/cm<sup>2</sup>, respectively). X-ray structural investigation was made of the contact zone between the alumina plate (made by sintering 99.4% Al<sub>2</sub>O<sub>3</sub> in argon for 5 hours at 1950°C to give a porosity of 0.2%) and the alloy. Spinel formation was found to extend to a considerable depth with cobalt. With nickel,  $\alpha$ -Al<sub>2</sub>O<sub>3</sub> and NiAl<sub>2</sub>O<sub>4</sub> were found on the plate at a point adjacent to the drop and  $\alpha$ -Al<sub>2</sub>O<sub>3</sub>, NiAl<sub>2</sub>O<sub>4</sub>, TiC, TiO<sub>2</sub> and NiAl on the plate at the contact zone; NiAl<sub>2</sub>O<sub>4</sub>, Ni, TiC, TiO<sub>2</sub> and NiAl were found in the molten drop at the contact zone. Thus the interfacial activity of titanium is evidently due to a reaction between the liquid metal and the solid alumina. There are 5 figures and 5 tables.

SUBMITTED: March 16, 1962

Card 2/2

ACCESSION NR: AT4030800

S/0000/63/000/000/0141/0151

AUTHOR: Tumanov, V. I., Funke, V. F., Belen'kaya, L. I. Usol'tseva, L. P.

TITLE: Effect of alloying on surface tension of the iron group metals and the wettability of aluminum oxide

SOURCE: AN UkrSSR. Institut metallokeramiki i spetsial'nykh splavov. Poverkhnostnye yavleniya v rasplavakh i protsessakh poroshkovoy metallurgii (Surface phenomena in liquid metals and processes in powder metallurgy). Kiev, Izd-vo AN UkrSSR, 1963, 141-151

TOPIC TAGS: cobalt alloy, nickel alloy, liquid phase surface tension, alloy surface tension, aluminum oxide, aluminum oxide wettability, cobalt copper alloy nickel copper alloy

ABSTRACT: The effects of alloying Co and Ni with Cu, Mo, W or Ti (0.5, 1.5 and 20 at. %), as well as carbides of the latter three (5 at. %), on the surface tension of the liquid phases and the wetting of  $Al_2O_3$  were studied on alloy samples ( $h = 5-6$  mm,  $\phi = 12$  mm)

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ACCESSION NR: AT4030800

and  $\text{Al}_2\text{O}_3$  substrates ( $h = 4$  mm,  $\phi = 20$  mm, porosity up to 0.2%). Tests were carried out in a vacuum ( $5 \times 10^{-5}$  mm Hg) at about 1500°C (1400°C for Cu-containing alloys). The contact angle  $\theta$  was determined experimentally, using the droplet-at-rest method (accuracy 1-2%). Surface tension  $\sigma_j$ , interphase tension  $\sigma_{\text{si}}$  and work of adhesion  $W_A$  were calculated. As shown in Fig. 1. of the Enclosure, addition of up to 1.0 at. % alloying elements, especially Cu, lowered  $\theta$ , but further additions had little effect. Small amounts of alloying elements (0.5-1 at. %), except for Ti, also lowered  $\sigma_j$  (see Figs. 2 and 3 in the Enclosure). Alloying with 5 at. % tungsten carbide lowered  $\theta$  and  $\sigma_j$  slightly in both Ni and Co; molybdenum carbide had no effect on these parameters in Ni and little effect in Co. Only titanium carbide lowered  $\theta$  significantly in Ni (from 120 to 62°) and Co (from 120 to 90°), while simultaneously increasing the surface tension. X-ray diffraction patterns of the contact areas between the drop and the substrate show that reactions take place between the liquid metal and the substrate, resulting in formation of a transition layer containing  $\text{CoAl}_2\text{O}_4$  and  $\text{NiAl}_2\text{O}_4$  with a spinel structure. In the case of Ni alloyed with titanium carbide, the transition zone also contained  $\text{TiC}$ ,  $\text{TiO}_2$  and  $\text{NiAl}$ . The authors demonstrate relationships between  $\theta$ ,  $\sigma_j$ ,  $\sigma_{\text{si}}$  and  $W_A$ , on

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ACCESSION NR: AT4Q30800

the one hand, and the atomic diameter and thermal stability of the alloying component oxides, on the other. The lowest  $\Theta$  (62°) and maximal  $W_A$  (3600 ergs/cm<sup>2</sup>) were found in Co + 5 at. % TiC. "The X-ray structural analysis was carried out by Eng. N. S. Urazaliyev." Orig. art. has: 5 tables and 6 graphs.

ASSOCIATION: Vsesoyuzn\*y nauchno-issledovatel'skiy institut tverdy\*kh splavov, Moscow  
(All-Union Scientific Research Institute for Solid Alloys)

SUBMITTED: 23Nov63

ENCL: 03

SUB CODE: MM

NO REF SOV: 005

OTHER: 006

Card 3/6

ACCESSION NR: AT4030800

ENCLOSURE: 01

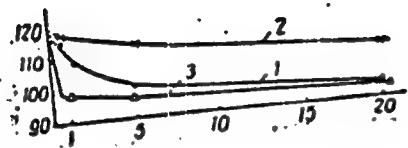


Fig. 1. Contact wetting angle ( $\theta$ ) for Ni, Co and their alloys on an  $\text{Al}_2\text{O}_3$  substrate, alloyed with W (1), Mo (2) and Cu (3). Ordinate =  $\theta$  in degrees; abscissa = at. % alloying element.

Card 4/6

ACCESSION NR: AT4030800

ENCLOSURE: 02

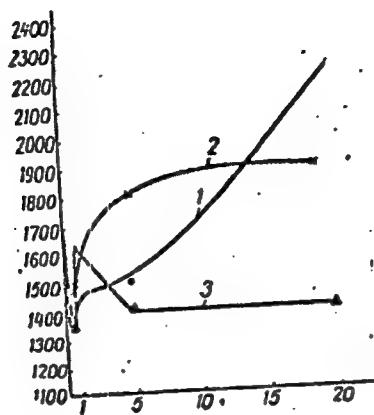


Fig. 2. Surface tension of Ni and its alloys ( $\text{Al}_2\text{O}_3$  substrate), alloyed with W (1), Mo (2) and Cu (3). Ordinate =  $\gamma$  in ergs/cm<sup>2</sup>; abscissa = at. % alloying element.

Card 5/6

ACCESSION NR: AT4030800

ENCLOSURE: 03

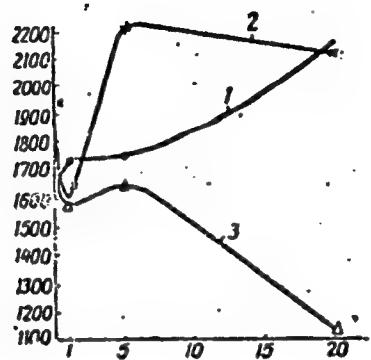


Fig. 3. Surface tension of Co and its alloys ( $\text{Al}_2\text{O}_3$  substrate), alloyed with W (1), Mo (2), Cu (3), 0.5 at. % Ti (x). Ordinate and abscissa as in Fig. 2.

Card 6/6

BORISOGLEBSKIY, B.N., kand. tekhn. nauk, red.; USOL'TSEVA, M.I.,  
red.

[Manufacture of centrifuges in the U.S.S.R.; collection of  
reports at the united session of the All-Union Scientific  
Research Institute of Chemical Machinery, the Ukrainian Sci-  
entific Research Institute of Chemical Machinery, and of the  
technical council of the Sumy Machinery Plant] TSentrifugo-  
stroenie v SSSR; sbornik dokladov na ob"edinennoi sessii na-  
uchno-tehnicheskikh sovetov Niukhimmasha, Ukrniukhimmasha i  
tekhnicheskogo soveta Ordena Lenina Sumskogo mashinostro-  
itel'nogo zavoda im. M.V.Frunze. Moskva, Otdel nauchno-  
tekhn. informatsii, 1963. 277 p. (MIRA 17:11)

Cutting points on the specific gravity curves for the  
various materials.  $\text{O}$   $\text{M}$   $\text{K}$

1900-1901. - 50. gms. for analysis of  $\text{H}_2\text{N}_2\text{O}_2$  and of a  
sample were measured at  $25^\circ$ . The above solutions of  
various strengths were prepared by dissolving the  
solid in water and diluting to the required volume.  
The strengths of the various solutions were as follows:  
10%  $\text{H}_2\text{N}_2\text{O}_2$  (10 gms.  $\text{H}_2\text{N}_2\text{O}_2$  in 90 gms. water);  
20%  $\text{H}_2\text{N}_2\text{O}_2$  (20 gms.  $\text{H}_2\text{N}_2\text{O}_2$  in 80 gms. water);  
30%  $\text{H}_2\text{N}_2\text{O}_2$  (30 gms.  $\text{H}_2\text{N}_2\text{O}_2$  in 70 gms. water);  
40%  $\text{H}_2\text{N}_2\text{O}_2$  (40 gms.  $\text{H}_2\text{N}_2\text{O}_2$  in 60 gms. water);  
50%  $\text{H}_2\text{N}_2\text{O}_2$  (50 gms.  $\text{H}_2\text{N}_2\text{O}_2$  in 50 gms. water);  
60%  $\text{H}_2\text{N}_2\text{O}_2$  (60 gms.  $\text{H}_2\text{N}_2\text{O}_2$  in 40 gms. water);  
70%  $\text{H}_2\text{N}_2\text{O}_2$  (70 gms.  $\text{H}_2\text{N}_2\text{O}_2$  in 30 gms. water);  
80%  $\text{H}_2\text{N}_2\text{O}_2$  (80 gms.  $\text{H}_2\text{N}_2\text{O}_2$  in 20 gms. water);  
90%  $\text{H}_2\text{N}_2\text{O}_2$  (90 gms.  $\text{H}_2\text{N}_2\text{O}_2$  in 10 gms. water);  
100%  $\text{H}_2\text{N}_2\text{O}_2$  (100 gms.  $\text{H}_2\text{N}_2\text{O}_2$  in 0 gms. water).

Ivanovs Chem-Tech Inst.

65-112-114  
AID P - 3753

Subject : USSR/Chemistry  
Card 1/1 Pub. 152 - 17/22  
Authors : Lapshin, B. M., V. A. Usol'tseva, and I. I. Zaslavskiy  
Title : Change in the potential of the  $PbO_2$ -electrode in the system  $H_2SO_4 \cdot xSO_3 - HNO_3$   
Periodical : Zhur. prikl. khim. 28, 9, 1009-1012, 1955  
Abstract : The changes of the potential in systems containing various amounts of  $HNO_3$  and of oleum were established and compiled in a table. One table, one diagram, 2 references, 1 Russian (1952).  
Institution : Ivanovo Chemical and Technological Institute  
Submitted : Ja 3, 1954

USSR/Physical Chemistry - Thermodynamics. Thermochemistry. Equilibrium. Physico-chemical Analysis. Phase Transitions, 3-8

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 373

Author: Usol'tseva, V. A.

Institution: None State Med. Inst. Ivanovo

Title: Chemical Processes in the Systems  $\text{HNO}_3 \cdot \text{H}_2\text{SO}_4 \cdot \text{nSO}_3$  for  $n < 1$

Original Periodical: Zh. prikl. khimii, 1956, Vol 29, No 2, 302-306

Abstract: In order to clarify the question on the interrelationship between the chemical processes, the systems were investigated by a number of methods. Curves are presented for 2 systems:  $\text{HNO}_3$ -17.1% fuming sulfuric acid and  $\text{HNO}_3$ -28.2% fuming  $\text{H}_2\text{SO}_4$ . By means of measurements of the specific gravity, viscosity, index of refraction, and the increase in specific gravity, regions of maximum accumulation of the molecules  $\text{NO}_2\text{HS}_2\text{O}_7$ ,  $\text{H}_2\text{NO}_3\text{HS}_2\text{O}_7$ ,  $\text{H}_3\text{OHSO}_4$ ,  $\text{NO}_2\text{HSO}_4$ , and  $\text{H}_2\text{NO}_3\text{HSO}_4$  have been established for different concentrations of the components and a probable mechanism for the chemical processes occurring in the systems

Card 1/2

USSR/Physical Chemistry - Thermodynamics. Thermochemistry. Equilibrium. Physico-chemical Analysis. Phase Transitions, B-8

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 373

Abstract:  $\text{HNO}_3 \cdot \text{H}_2\text{SO}_4 \cdot n\text{SO}_3$  ( $n < 1$ ) is given. The results of the investigation do not confirm the assumptions in the literature concerning the existence of the following compounds in the  $\text{HNO}_3 \cdot \text{H}_2\text{SO}_4 \cdot \text{SO}_3$  system:  $9\text{H}_2\text{SO}_4 \cdot \text{HNO}_3$ ,  $9\text{H}_2\text{SO}_4 \cdot 2\text{NO}_3$ ,  $3\text{H}_2\text{SO}_4 \cdot 22\text{HNO}_3$ ,  $3\text{HNO}_3 \cdot \text{SO}_3$ ,  $11\text{SO}_3 \cdot 2\text{N}_2\text{O}_5 \cdot 9\text{H}_2\text{O}$ ,  $10\text{SO}_3 \cdot \text{N}_2\text{O}_5 \cdot 2\text{H}_2\text{O}$ ,  $5\text{SO}_3 \cdot 2\text{N}_2\text{O}_5 \cdot 2\text{H}_2\text{O}$  and others.

Card 2/2

USOL' TSEVA, V.A.

Specific gravity curves of the systems:  $\text{HNO}_3 - \text{H}_2\text{SO}_4 \cdot \text{MSO}_3$  with  
 $M > 1$ .  
Zhur. prikl. khim. 29 no. 2: 306-308 F '56. (MIRA 9:6)

1. Ivanovskiy gosudarstvennyy meditsinskiy institut.  
(Sulfuric acid) (Nitric acid) (Specific gravity)

SOV/153-58-5-28/26

5(2)  
AUTHOR:Usol'tseva, V. A.

TITLE:

Isothermal Lines of the Specific Weight of the Ternary System:  
Nitric Acid - Sulfuric Acid - Sulfur Trioxide (Izotermnaya  
diagramma udel'nogo vesa trekhkomponentnoy sistemy: azotnaya  
kislota-sernaya kislota-sernyy angidrid)

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya  
tekhnologiya, 1958, Nr 5, pp 162-163 (USSR)

Card 1/2

In the comprehensive publications on the investigation of the specific weight of mono- and multicomponent systems there are no data concerning the system mentioned in the title. Its study offers considerable difficulties. The author has been dealing with it for many years. The production of single components is described. The composition of the systems was analytically checked. The determinations were carried out with freshly prepared individual systems. A chamber with absolutely dry air was used. The temperature during the determination of the systems in liquid state was maintained at  $20 \pm 0.05^\circ$  by means of a water thermostat. A pycnometer of a capacity of about 20 ml was used for the determinations. The maximum error of the de-

SOV/153-58-5-28/28  
Isothermal Lines of the Specific Weight of the Ternary System: Nitric Acid -  
Sulfuric Acid - Sulfur Trioxide

terminations amounted to 0.0005. Based upon the results an isothermal ternary diagram (Fig p 162) was plotted. By means of this diagram the specific weight of any individual system can be determined at 20° with an accuracy of  $\pm 0.005 \text{ g/cm}^3$ . There are 1 figure and 8 references, 5 of which are Soviet.

ASSOCIATION: Ivanovskiy gosudarstvennyy meditsinskiy institut, Kafedra ne-  
organicheskoy i analiticheskoy khimii (Ivanovo State Medical  
Institute, Chair of Inorganic and Analytical Chemistry)

SUBMITTED: January 18, 1958

USCOMX-DC-61131

Card 2/2

USOL'TSEVA, V.A.

Physicochemical analysis of the system nitric acid - sulfuric acid monohydrate. Izv.vys.ucheb.zav.; khim.i khim.tekh. 2 (MIRA 13:8) no.5:662-664 '59.

1. Ivanovskiy gosudarstvennyy meditsinskiy institut, kafedra neorganicheskoy i analiticheskoy khimii.  
(Nitric acid) (Sulfuric acid)

USOL'TSEVA, V.A.

Refractometric and viscosimetric study of the system nitric acid - sulfuric acid - sulfuric anhydride. Izv.vys.ucheb.zav.: khim.i khim.tekh. 2 no.6:871-875 '59. (MIRA 13:4)

1. Ivanovskiy gosudarstvennyy meditsinskiy institut. Kafedra neorganicheskoy i aniliticheskoy khimii.  
(Sulfuric acid) (nitric acid) (Sulfur trioxide)

USOL'TSEVA, V.A.

Synclinal fold on the electric conductivity diagram for  
the system nitric acid - sulfuric acid - sulfuric anhydride.  
Zhur.neorg.khim. 5 no.7:1559-1563 J1 '60.  
(MIRA 13:7)

1. Ivanovskiy gosudarstvennyy meditsinskiy institut.  
Kafedra neorganicheskoy i analiticheskoy khimii.  
(Nitric acid) (Sulfuric acid) (Sulfur trioxide)

USOL'TSEVA, V.A.

Phase diagram of the system nitric acid - sulfuric acid -  
sulfuric anhydride. Zhur.neorg. khim. 6 no.3:720-726 Mr '61.  
(MIRA 14:3)

1. Ivanovskiy gosudarstvennyy meditsinskiy institut, kafedra  
neorganicheskoy i analiticheskoy khimii.  
(Nitric acid) (Sulfuric acid) (Sulfur trioxide)

CHISTYAKOV, I.G.; USOL'TSEVA, V.A.

Systems with liquid crystals. Part 1: Cholesterol compounds.  
Izv.vys.uch.zav.; khim.i khim.tekh. 5 no.4:585-588 '62.  
(MIRA 15:12)  
1. Ivanovskiy gosudarstvennyy meditsinskiy institut i Institut  
kristallografii AN SSSR.  
(Cholesterol)

CHISTYAKOV, I.G.; USOL'TSEVA, V.A.

Systems with liquid crystals. Part 2: Systems  
cholesterol - ethyl alcohol and cholesterol - glycerol.  
Izv.vys.uch.zav.; khim.i khim.tekh. 5 no.4:589-593 '62.  
(MIRA 15:12)  
(Cholesterol) (Hexadecanol) (Glycerol)

CHISTYAKOV, I.G.; USOL'TSEVA, V.A.; NASYROVA, M.D.; YERSHOVA, L.I.

Systems having the liquid crystalline state. Part 3: Cholesteryl caprylate and cholesteryl caprinate. Izv.vys.ucheb.zav.;khim. i khim.tekh. 6 no.2:257-259 '63. (MIRA 16:9)

1. Ivanovskiy gosudarstvennyj meditsinskiy institut i Institut kristallografiyi AN SSSR.  
(Cholesterol esters) (Octanoic acid)

CHISTYAKOV, I.G.; USOL'TSEVA, V.A.; NASYROVA, M.D.

Systems have the liquid crystalline state. Part 4: p,p'-  
Nonoxybenzaltoluidine. Izv. vys. ucheb. zav.; khim. i khim.  
tekhn. 6 no.3:434-436 '63. (MIRA 16:8)

1. Ivanovskiy gosudarstvennyy meditsinskiy institut i Institut  
kristallografi. AN SSSR.  
(Liquid crystals) (Toluidine--Thermal properties)

CHISTYAKOV, I.G.; USOL'TSEVA, V.A.

Systems having the liquid crystalline state. Part 5:  
Paraazoxyanisole and paraazoxyphenetole. Izv. vys. ucheb. zav.;  
khim. i khim. tekhn. 6 no.3:436-439 '63. (MIRA 16:8)

(Liquid crystals) (Anisole—Thermal properties)  
(Phenetole—Thermal properties)

USOL'TSEVA, V.A.; CHISTYAKOV, I.G.

Chemical characteristics, structure, and properties of liquid  
crystals. Usp.khim. 32 no.9:1124-1151 S '63. (MIRA 16:9)

1. Ivanovskiy gosudarstvenny, meditsinskiy institut i Institut  
kristallografi i AN SSSR.  
(Liquid crystals)

BR

ACCESSION NR: AT4033560

8/2922/63/009/000/0114/0118

AUTHOR: Usol'tsev, V. A.; Manuylov, K. N.

TITLE: Attainments in the development of a radiosonde for network use and certain prospects in radiosonde work

SOURCE: Vsesoyuzhoye nauchnoye meteorologicheskoye soveshchaniye. 1st, Leningrad, 1961. Pribory\* i metody\* nablyudeniy (Instruments and methods of observation); trudy\* soveshchaniya, v. 9. Leningrad, Gidrometeoizdat, 1963, 114-118

TOPIC TAGS: meteorology, meteorological instrument, radiosonde, A-22 radiosonde, aerology, meteorological service

ABSTRACT: The RZ-049 radiosonde has been replaced by the A-22. The latter measures temperature, pressure and humidity with considerably greater accuracy than the RZ-049 and RKZ radiosondes. Although the new instrument is simple, its cost still somewhat exceeds the earlier radiosonde. The A-22-III, the most widely used version of the A-22, is based on use of a special code drum. The mechanism of the instrument consists of independent pressure, temperature and air humidity units, plus the code drum, all mounted on a light frame. Pressure is measured in the range 1050-10 mb, temperature in the range 40 to -75C and relative humidity from

Cord. 1/3

ACCESSION NR: AT4033560

15 to 100%. These units and the code drum are described briefly, but there are no illustrations. The housed radiosonde, without batteries, weighs less than 600 g. A new modification of the A-22, the A-22-IV, has now been developed and is in production. It has an electric motor which operates at low temperatures; no lubricant is needed on the bearings. The rigidity of the frame has been strengthened without an increase in weight, resulting in an increase in the stability of readings. The pressure unit has been changed considerably. The A-22-III used a pressure unit manufactured of phosphor bronze with a temperature compensator for decreasing temperature errors; the temperature compensator has been removed in the A-22-IV and the pressure unit now is made of a special steel with a very small temperature coefficient. The housing now is smaller and made of white plastic. The radio transmitter and the power source are in separate housings and are attached beneath the instrument. The authors note that the accuracy of radiosonde measurements still is too low. It is important to shorten the time between the end of sounding and the time of arrival of telegrams at prognostic centers; the tediousness of processing radiosonde data must be decreased by use of electronic computers. The ceiling reached by instruments must be increased by development of improved balloons and the instruments themselves must be improved to permit accurate operation at great heights. Orig. art. has: 2 formulas.

Card 2/3

ACCESSION NR: AT4033560

ASSOCIATION: Nauchno-issledovatel'skiy institut gidrometeorologicheskogo priborostroyeniya (Scientific Research Institute of Hydrometeorological Instrumentation)

SUBMITTED: 00

DATE ACQ: 16Apr64

ENCL: 00

SUB CODE: ES

NO REF Sov: 000

OTHER: 000

Card 3/3

L 26090-65 EXT(1)/FCC CW

S/2778/64/000/012/0041/0047

ACCESSION NR: A15001380

18

AUTHOR: Usol'tsev, V. A.

9

TITLE: Radiometeorograph

B+1

SOURCE: Leningrad. Nauchno-issledovatel'skiy institut gidrometeorologicheskogo priborostroyeniya. Trudy, no. 12, 1964. Voprosy gidrometeorologicheskogo priborostroyeniya (Problems in hydrometeorological instrument manufacture), 41-47

TOPIC TAGS: meteorological instrument, meteorograph, radiometeorograph, meteorological balloon, atmospheric pressure, atmospheric humidity, atmospheric temperature

ABSTRACT: A radiometeorograph is described which was developed for sounding of the atmosphere using a captive balloon. In this instrument, the drum and clock mechanism have been replaced by a coding device and radio transmitter. The received signals are recorded at a ground station and the operator can be informed of changes in meteorological parameters as they occur. The A-46 radiometeorograph consists of a complex of meteorological instruments, the transmitter and a source of electrical current. Signals are received and recorded by the radio receiver of a "Malakhit" radiotheodolite and a PR-4 gemiautomatic recorder. The A-46 is

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designed for measurement in the ranges: atmospheric pressure -- 1040 to 750 mb, temperature -- +35 to -15°C and relative humidity from 30 to 100%. The meteorological complex is in most ways similar to that of the A-22 radiosonde, consisting of pressure, temperature and humidity sensors, a code drum, an electric motor and fan. The pressure unit, as in the A-22, consists of five aneroid capsules; sensitivity of the unit is from 1.1 to 1.6 mb per track of the code drum and the temperature coefficient does not exceed 0.1 mb per 1°C. The temperature sensing element is a bimetallic spring, designed for measurements in a narrower temperature range than in the A-22, and thus ensuring higher sensitivity. The humidity sensor is an animal membrane attached to a ring. Measured values are transmitted in Morse code. The code drum plate has 300 tracks each 0.25 mm wide. The radio transmitter is type A-36, slightly modified. Including the power source, the radiometeorograph weighs 2.8 kg. Measurements of all parameters can be made either during ascent or descent of the balloon. Components of the apparatus are described and a simplified electrical circuit diagram accompanies the text. "The principal assistants to the author in the development of this device were K. N. Manuylov, G. S. Gershenson, M. K. Fedorova and S. I. Nepomnyashchiy." (rig. art. has: 4 figures.

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L 26090-65  
ACCESSION NR: AT5001380

ASSOCIATION: Nauchno-issledovatel'skiy institut gidrometeorologicheskogo  
priborostroyeniya, Leningrad (Hydrometeorological instrument making scientific  
research institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: ES

NO REF SOV: 000

OTIER: 000

Card 3/3

USOL'TSEVA, V.A.; CHRISTYAKOV, I.G.; NASTYROVA, M.D.

Thermographic and polarizing microscope study of L-ascorbic acid. Izv. vys. ucheb. zav.; khim. i khim. tekhn. 8 no.1:65-68 '65. (MIRA 18:6)

1. Ivanovskiy gosudarstvennyy meditsinskiy institut, kafedra biokhimi i kafedra fiziki.

USOL'TSEVA, Ye. V.

Indications for amputations of fingers in war and peace  
time. Khirurgiia, Moskva, no. 10:82-85 Oct. 1950. (CLML 20:1)

1. Leningrad.

USOL'TSEVA, Ye.V. (Leningrad) (Rasveta)

"Paronychia and its treatment with A.V. Vishnevskii's method." A.N. Ryzhikh.  
Reviewed by E.V. Usol'tseva. Khirurgiia no.2:79-80 p '54. (MLRA 7:5)  
(Felon (Disease)) (Ryzhikh, A.N.)

U.S.S.R. Sov. 1/2 V  
USOLOTSIEVA, Ye.V., professor.

Prevention of pyogenic diseases of the hand and fingers.  
Khirurgia no.6:40-43 Je '55. (MLRA 8:10)  
(HAND, wounds and inj.  
pyogenic, prev.)  
(WOUNDS AND INJURIES.  
hand, pyogenic, prev.)

USOL'TSEVA, Ye.V.

USOL'TSEVA, Ye.V., professor (Leningrad)

Dermoid cyst of an ungual phalanx. Ortop., travm. i protez. 18 no.2:55  
(MIRA 10:8)

Mr-Ap '57.  
(FINGERS--TUMORS) (CYSTS)

USOL'TSEVA, Ye. V.

USOL'TSEVA, Ye. V.; GOLOVINA, Ye. P.; SHTOL'TSMER, V. R.

Effect of heat and cold in the treatment of bruises and strain of  
the soft tissues. Sov.med. 21 Supplement:6 '57. (MIRA 11:2)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta  
fizioterapii i kurortologii.  
(HEAT--PHYSIOLOGICAL EFFECT)  
(COLD--THERAPEUTIC USE)  
(MUSCLES--WOUNDS AND INJURIES)

USOL' TSEVA, Ye.V., prof. (Leningrad)

Brief review of foreign literature on the treatment of wrist injuries.  
Ortop. travm. i protez. 20 no.1:83-87 Ja '59. (MIRA 12:3)  
(HAND, wds. & inj.  
ther., review (Rus))

USOL'TSEVA, Ye.V.; GOLOVINA, Ye.N.

Dermovascular reactions following the local action of heat and  
cold on intact and bruised tissues; experimental observations.  
Vop. kur., fizioter. i lech. fiz. kul't. 24 no. 4:342-346  
(MIRA 13:8)  
JL-Ag '59.

1. Iz Leningradskogo instituta fizioterapii i kurortologii  
(dir. - kand. meditsinskikh nauk G.S. Antonov).  
(HEAT—PHYSIOLOGICAL EFFECT) (COLD—PHYSIOLOGICAL EFFECT)  
(SKIN)

USOL'TSEVA, Ye.V.

Injuries and diseases of the hand. Ortop. travm. i protez. 21  
no. 10:3-12 '60. (MIRA 14:1)  
(HAND—DISEASES)

USOL'TSEVA, Yelena Vasil'yevna; UDERMAN, Sh.I., red.; KHARASH, G.A.,  
tekhn. red.

[Injuries to the hand] Povrezhdeniya kisti. Leningrad, Medgiz,  
1961. 269 p. (MIRA 15:4)  
(HAND--WOUNDS AND INJURIES)

USOL'TSEVA, Yelena Vasil'yevna

[Bone injuries] Povrezhdeniya kosti. Leningrad, Medgiz, 1961.  
269 p. (MIRA 14:11)  
(BONES—WOUNDS AND INJURIES)

USOL'TSEVA, Ye.V., prof.

Sequelae following dislocations in the articulations of the  
finger and hand. Ortop., travm.i protez. no.7:27-32 '61.  
(MIRA 14:8)

(HAND—DISLOCATIONS)

USOL'TSEVA, Ye.V., prof. (Leningrad)

Hand injuries and their treatment. Med.sestra 21 no.7:27-34 J1  
'62. (MIRA 15:8)

(HAND--WOUNDS AND INJURIES)

USOL'ITSEVA, Ye.V., prof. (Leningrad)

Contusion of the extremities. Sov. Med. 27 no.7:34-38 Jl '63.  
(MIRA 16:9)

(EXTREMITIES (ANATOMY) --WOUNDS AND INJURIES)

USOL'TSEVA, Ye.V., prof. (Leningrad P-42, Pionerakaya ul., d.45, kv.20)

Progressive diseases of the auxiliary apparatuses of the hand.  
Ortop., travm. i protez. 26 no.8:32-37 Ag '65. (MIRA 18:9)

USONYTE, J.

Hemorrhagic vasculitis in children. Sveik. apsaug. no.12:3-8 '62.

1. Vilniaus Valstybinio V. Kapsuko v. universiteto Medicinos fakulteto  
infekciniu ir vaiku ligu katedra.  
(PURPURA)

USONYTE, J.

Lesions of the central nervous system in hemorrhagic vasculitis. Sveik. apsaug. 8 no.7:23-26 Je'63.

1. Vilniaus Valst. V.Kapsuko v. universiteto Medicinos fakultetas.

USCNYTE, J.

On abdominal syndrome in hemorrhagic vasculitis. Sveik. apsaug.  
8 no.10:3-7 0163

1. Vilniaus Valst. V.Kapsuko v. universiteto Medicinos fa-  
kultetas.

\*

USOROV, P.P.

"What does the Ryazan regional scientific and productional laboratory work at?"

Veterinariya, Vol. 37, No. 7, 1960, p. 26

Director, Ryazan oblast Sci.-Industrial Vet.-Lab.

SOV/32-24-12-18/45

7(1)  
AUTHORS:

Lopatko, I. F., Usoskin, G. I.

TITLE:

Method for Measuring the Thickness Using the Ultrasonic Impulse-Thickness Gage (Metodika izmereniya tolshchiny s ispol'zovaniem ul'trazvukovogo impul'snogo tolshchinomera)

PERIODICAL:

Zavodskaya Laboratoriya, 1958, Vol 24, Nr 12, pp 1464-1467  
(USSR)

ABSTRACT:

The measurement of the thickness of objects which only present one accessible surface for measurement (walls of autoclaves, piping, etc.) is of greatest importance with regard to corrosion and erosion requirements. It was for this purpose that the apparatus mentioned in the title was constructed. This apparatus makes it possible to measure thicknesses of 1 or 2 to 30 mm. The error involved is a maximum of 2% with thicknesses of 2-5 mm, and is 1% maximum with thicknesses of 5-30 mm. The diameter of the piezo vibrators in the apparatus is 13 mm, but this can be reduced to 5-7 mm. A 6Ye5S electron-optical indicator was used. The determination with this apparatus is based upon measuring the time interval between two impulses which are reflected from the opposite surface. Since the

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SOV/32-24-12-18/45

Method for Measuring the Thickness Using the Ultrasonic Impulse Thickness  
Gage

velocity of the ultra-sound in the particular medium is known  
the thickness can be determined from measuring this time inter-  
val. A schematic representation of the thickness gage is given  
together with the experimental arrangement (Figs 1,3) and a  
measurement diagram (Fig 2) with corresponding appropriate  
explanations and calculation formulae. There are 4 figures.

ASSOCIATION: Leningradskiy elektrotekhnicheskiy institut im. V. I. Ul'yanova  
(Lenina) (Leningrad Electrotechnical Institute imeni V. I.  
Ul'yanov (Lenin))

Card 2/2

TSOSKIN, I.

tsoskin, I. - "A case of congenital malformation", Sbornik rabot Studench. nauch. o-va Khar'k. med. in-ta, No. 3, 1949, p. 113-22.

so: U-4110, 17 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 19, 1949).

USSR / Human and Animal Physiology. Internal Secretion, Sex Glands. T

Abs Jour : Ref Zhur - Biol., No 15, 1958, No. 70446

Author : Usoskin, I. I.

Inst : Not given

Title : The Exchange of Chorionic Gonadotropin between Mother and Fetus

Orig Pub : Akusherskvo and Ginekologiya, 1957, No. 4, 46-50

Abstract : In normal pregnancy, the blood contains 333-1000 frog units of gonadotropin (G); in multiple-fetus pregnancy, 2000-2500 units; in eclampsia and pre-eclampsia, 5000-33,333 units of G. In the urine in eclampsia, there are 1428-50,000 units of G. In the umbilical blood no G is detectable. The placenta forms G, but the latter does not pass across the placental barrier.

Card 1/1

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USOSKIN, I. I. Cand Med Sci -- (diss) "Clinical experimental data on chorionic gonadotropin <sup>uN</sup> during normal pregnancy and in ~~cases~~ of pregnancy toxemia."  
Khar'kov, 1959. 13 pp (Khar'kov Med Inst) 200 copies (KL, 52-59, 148)

-148-

USOSKIN, I.I.

On the problem of the chorionic gonadotropin content of the mother and fetus in toxemias of the second half of pregnancy. Probl.endok.  
(MIRA 13:5)  
1 gorm. 5 no.5:102-108 S-0 '59.

1. Iz fiziologicheskogo otdela (zav. - dotsent B.A. Vertapetov)  
Ukrainskogo instituta eksperimental'noy endokrinologii i Khar'-  
kovskogo rodil'nogo doma No.1 (glavnnyy vrach V.N. Krasnoshchek).  
(GONADOTROFINS CHORIONIC metab.)  
(PREGNANCY TOXEMIAS metab.)

USOSKIN, I.I., kand. med. nauk; ZLATKIS, L.S., kand.med. nauk

Course of pregnancy, labor and puerperium in some organic  
diseases of the central nervous system. Akush. i gin. 39  
no. 3:68-72 My-Je'63 (MIRA 17:2)

1. Iz neyroginiekologicheskogo i akusherskogo otdeleniya (na-  
chal'nik - kand. med. nauk I.I. Usoskin, nauchnyy rukovoditel' -  
doktor med. nauk I.Z. Vel'vovskiy) Tsentral'noy psichonevrolo-  
gicheskoy i neyrokhirurgicheskoy bol'nitsy Ministerstva putey  
soobshcheniya (nachal'nik - zasluzhennyy vrach UkrSSR V.M.  
Yushtin).

USOSKIN, I.I.; BELOUS, L.N.

Use of the ganglionic blocking agent pyrilene in toxicoses during the second half of pregnancy. Trudy Ukr. nauch.-issl. inst. eksper. endok. 19:418-420 '64. (MIRA 18:7)

1. Iz rodil'nogo otdeleniya TSentral'noy klinicheskoy psichoneurologicheskoy bol'nitsy Ministerstva putey soobshcheniya SSSR.

USOSKIN, M. M.

Short term credit in the USSR national economy Leningrad, Gosfinizdat, 1948.  
77 p. (49-2 374)

HG3729.R0U67

1. Credit - Russia

USCSKIN, M. M.

Organizatsiya I Planirovaniye Kredita v SSSR. (Organization  
and Planning of Credit in the USSR) Pod. Red. V. M. Batyreva.  
Moskva, Gosfinizdat, 1951. 455 P. Tables.

So: N/5  
784.65  
.U8

BATYREV, V.M.; USOSKIN, M.M.

[Short-term credit and the organization of currency circulation in the  
U.S.S.R.] Kratkozrochnyi kredit i organizatsiya denezhnogo obrashcheniya  
v SSSR. Moskva, Gosfinizdat, 1952. 171 p. (MLRA 6:10)  
(Credit) (Banks and banking) (Currency question)

USOSKIN, M.

Some problems in the further strengthening of business accounting.  
(MLRA 8:2)  
Den. i kred. 12 no.4:10-16 0'54.  
(Industrial management)(Banks and banking)

USOSKIN, M.; SITNIN, V., redaktor; LOGOVINSKAYA, R., redaktor; DENISOVA, O.,  
tekhnicheskiy redaktor

[Short-term credit in the U.S.S.R.] Kratkozrochnyi kredit v  
SSSR. Moskva, Gosfinizdat, 1955. 107 p. (MLRA 9:2)  
(Banks and banking) (Russia--Credit)

USOSKIN, M., professor.

Development of short-term credit in the U.S.S.R. Den.1 kred. 15  
no.9:1-11 S '57. (MIRA 10:10)  
(Credit)

IKONNIKOV, Vladimir Vasil'yevich, prof.; USOSKIN, M.M., prof., otv.  
red.; SUBBOTINA, K., red.izd-va; TELEGINA, T., tekhn.red.

[Credit in a socialist society] Kredit v sotsialisticheskem  
obshchestve. Moskva, Gosfinizdat, 1959. 87 p. (MIRA 12:11)  
(Credit)

ATLAS, Z.V., prof., red.; USOSKIN, M.M., prof., red.; SHVARTS, G.A.,  
dotsent, red.; VOROB'IEV, S.V., kand.ekon.nauk, red.

[Issuing credit to branches of the national economy of the  
U.S.S.R.] Voprosy kreditovaniia otrazlei narodnogo khoziaistva  
SSSR. Moskva, M-vo vysshego obrazovaniia SSSR, 1959. 270 p.  
(MIRA 12:10)

1. Moscow. Finansovyy institut.  
(Credit)

USOSKIN, M., prof., doktor ekon.nauk

Raising the economic standard of credit work. Den. i kred. 17 no.1:  
10-18 Ja '59. (MIRA 12:4)  
(Credit)

USOSKIN, M., prof.

Credit problems in the national economy of socialist countries.  
Den. i kred. 18 no.1:20-27 Ja '60. (MIRA 13:1)  
(Credit)

USOSKIN, M., prof.

"Currency circulation in the U.S.S.R." by V.M.Batyrev. Reviewed  
by M.Usoskin. Den. 1 kred. 18 no.9:87-93 8 '60. (MIRA 13:8)  
(Money)  
(Batyrev, V.M.)

USOSKIN, M.M., prof.; TARASOV, M.M., dotsent, prepod.; INOZEMTSEVA, N.S.,  
kand. ekon. nauk, prepod.; VOROB'YEV, S.F., dotsent, prepod.;  
MAKAROCHKIN, A.V., dotsent, prepod.; BOROZDIN, B., red.; LEBEDEV, A.,  
tekhn. red.

[Collection of problems on the issuing of credit, payments, and currency circulation] Sbornik zadach po kreditovaniu, raschetam i denezhnomu obrazshcheniu. Avtorskii kollektiv po rukovodstvom M.M. Usoskina. Moskva, Gosfinizdat, 1961. 206 p. (MIRA 14:10)

1. Moscow. Finansovyy institut. 2. Moskovskiy finansovyy institut  
(for Tarasov, Inozemtseva, Vorob'yev, Makarochkin).  
(Finance)

SHENGER, Yuryi Yevgen'yevich, doktor ekonom. nauk; USOSKIN, M.M., prof.  
otv. red.; BOROZDIN, B., red.; TELEGINA, T., tekhn. red.

[Studies on Soviet credit] Ocherki sovetskogo kredita. Moskva,  
Gosfinizdat, 1961. 406 p. (MIRA 15:1)  
(Credit)

USOSKIN, Mark Mikhaylovich, prof.; KONDRAT'YEVA, A., red.; TELEGINA, T.,  
tekhn. red.

[The organization and planning of credit] Organizatsiia i planiro-  
vanie kredita. 3., , erer. i dop. izd. Moskva, Gosfinizdat, 1961.  
414 p. (MIRA 15:6)

(Credit)

D'YACHENKO, V.P., glav.red.; BACHURIN, A.V., kand. ekon. nauk, zam. glav. red.; GRASHCHENKO, V.S., kand. ekon. nauk, zam. glav. red.; ALEKSANDROV, A.M., doktor ekon. nauk, prof., red.; KISMAN, N.A., red.; LYUBIMOV, N.N., doktor ekon. nauk, prof., red.; PERESLEGIN, V.I., doktor ekon. nauk, prof., red.; USOSKIN, M.M., doktor ekon. nauk, prof., red.; BREGEL', E.Ya., doktor ekon. nauk, prof., red.; PLESHAKOV, S.Ye., red.; BUTAKOV, D.D., kand. ekon. nauk, red.; PODSHIVALENKO, P.P., red.; CHIZHOV, K.Ya., kand. ekon. nauk, red.; SHEVENEV, M.K., kand. ekon. nauk, red.; DARKOV, G.V., red.

[Financial and credit dictionary] Finansovo-kreditnyi slovar'. Chleny glav. red.: A.M.Aleksandrov i dr. Moskva, Finansy. Vol.2. M-IA. 1964. 688 p. (MIRA 17:9)

1. Chlen-korrespondent AN SSSR (for D'yachenko).

USOSKIN, V.

Mechanization of operations in foreign banks. Den. i kred. 14 no.3:  
58-62 Ag '56. (MLRA 9:9)  
(Banks and banking--Furniture, equipment, etc.)

USOSKIN, V.

Process of increasing concentration of bank capital in the U.S.  
Den. 1 kred. 15 no. 4:47-57 Ap '57. (MIRA 10:6)  
(United States--Banks and banking)

USOSKIN, V.

"The empire of high finance" [in English] by V. Perlo. Reviewed  
by V. Usoskin. Den. i kred 15 no.12:43-52 D '57. (MIRA 11:2)  
(United States--Finance)  
(Perlo, V)

USOSKIN, V.

American banks and distribution of the public debt in the U.S.A.  
Den. i kred. 17 no.12:68-80 D '59. (MIRA 12:12)  
(United States--Banks and banking)  
(United States--Debts, Public)

USOSKIN, V.

Holding companies are tools of monopolistic control in the U.S.A.  
business. Den. i kred 19 no.3:80-87 Mr '61. (MIRA 14:3)  
(United States—Holding companies)  
(United States—Banks and Banking)

USOSKINA, R.Ya., kand. med. nauk (Riga 12, ul. Lenina, d. 138, kv.24-a);  
KRUMIN', K.A. [Krumins, K.], kand. med. nauk; ANDREYEVA, Ye.I.,  
kand. med. nauk

Polyclinic service for children with diseases and traumas of  
the locomotor apparatus in the Latvian S.S.R. Ortop., travm.  
i protez. 26 no.11:9-16 N '65. (MIRA 18:12)

1. Iz Rizhskogo instituta travmatologii i ortopedii (direktor -  
dotsent V.K. Kalnberz [Kalnberzs, V.]) i otdela lechebno-profi-  
lakticheskoy pomoshchi detyam i materyam (nachal'nitsa Ye.I.  
Andreyeva) Ministerstva zdravookhraneniya Latviyskoy SSR.

The Influence of Some Factors on the Transformation of the Austenite in High-Speed Steel R and Steel ZK4V8. I. P. Lipkin and A. Usov. (Kachetivnaya Stal, 1938, No. 2, pp. 11-19. (In Russian).) Steel R contained carbon 0.70%, chromium 4.34%, tungsten 18.5% and vanadium 0.60%, whilst the composition of steel ZK4V8 was carbon 0.35%, chromium 2.55%, tungsten 7.70% and vanadium 0.37%. Both steels were studied in the as-cast, rough-forged and fine-rolled conditions. The progress of the austenite transformation was studied by Rockwell-C hardness measurements (given in graphical form) and, in a number of cases, by microscopic examination. The effects of the original structure, the temperature of the first heat treatment, the rate of cooling from this temperature to the isothermal-transformation temperature and of plastic deformation at temperatures above the  $A_1$  point on the decomposition of the supercooled austenite were studied. It was found that the supercooled austenite decomposed more rapidly in the forged and the rolled than in the as-cast specimens, owing to the greater number of carbide fragments present. Raising the temperature to which the steel was originally heated considerably increased the stability of the supercooled austenite owing to dissolution of the carbides and also because of the growth of the austenite grains. Precipitation of carbides during slow cooling from the above temperature lowered the stability of the austenite. Plastic deformation also lowered the stability owing to the breaking-up of the austenite grains and the precipitation of carbide particles which took place during the deformation.

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001858210002-4"

RYZHOV, I.; MEZHEVIKIN, V., mashinist kombayna; USOV, A., mashinist  
kombayna.

Using comgines in mining steeply inclined coal seams. Mast.ugl.3  
no.10:13-14 0 '54. (MIRA 7:12)

1. Machal'nik uchastka shakty im. Ruyantseva kombinata  
Stalinugol'.  
(Coal-mining machinery)

USOV, Aleksandr Aleksandrovich; POGODAYEV, Konstantin Il'ich; DERVIZ, G.V.,  
professor, redaktor; SENCHILO, K.K., tekhnicheskiy redaktor

[Universal nomographic chart for computation and methods of  
determination of reaction of oxidation-reduction potential of  
biological liquids] Universal'naya nomogramma dlia vuchisleniya  
i metody opredeleniya aktivnoi reaktsii i okislitel'no-vosstano-  
vitel'nogo potentsiala biologicheskikh zhidkosteii. Moskva, Gos.  
izd-vo med.lit-ry, 1956. 30 p.

(MLRA 10:?)

(BLOOD--ANALYSIS AND CHEMISTRY)  
(OXIDATION-REDUCTION REACTION)

PHASE I BOOK EXPLOITATION

SOV/4536

Rybkin, Yevgeniy Aleksandrovich, and Anatoliy Antonovich Usov

Shesterennyye nasosy dlya metallorezhushchikh stankov (Gear Pumps for Metal-Cutting Machine Tools) Moscow, Mashgiz, 1960. 186 p. Errata slip inserted. 7,500 copies printed.

Reviewer: V.V. Yermakov, Candidate of Technical Sciences; Ed. of Publishing House: G.I. Baydakov; Managing Ed. for Literature on Metalworking and Machine-Tool Making (Mashgiz): V.I. Mitin, Engineer; Tech. Ed.: L.P. Gordeyeva.

PURPOSE: This book is intended for engineers engaged in the design and production of machine tools and in metal-cutting machine-tool hydraulics.

COVERAGE: The book contains an analysis of theoretical and experimental investigations of methods for designing and constructing hydraulic gear pumps used in the hydraulic actuation of metal-cutting machine tools. The book is based on recent research carried out by various Soviet and non-Soviet scientists specializing in this field, and on experience gained from the operation of various types of gear pumps. The book contains illustrations and practical suggestions. Chapters III and IV were written by Ye.A. Rybkin. A.A. Usov wrote Chapters I and II, and Sections 1,2, and 7 of Chapter III. The two authors collaborated

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Gear Pumps (Cont.)

SOV/4536

in writing the Introduction and Section 9 of Chapter III. No personalities are mentioned. There are 50 references: 31 Soviet, 15 English, and 4 German.

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2. Classification of pumps	11
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Determination of relationships for designing pumps with backlash in the intermeshing of spur-gear rotors	21
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